



# 350W Single Output Switching Power Supply

# ERP-350 series



### ■ Features :

- AC input 180~264VAC
- Withstand 300VAC surge input for 5 seconds
- Design against rain splash
- Protections: Short circuit / Overload / Over voltage/ Over temperature
- Cooling by free air convection
- LED indicator for power on
- Low cost,high reliability
- 100% full load burn-in test
- 3 years warranty



(except for 12V)

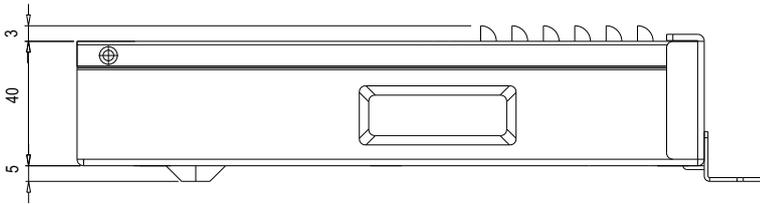
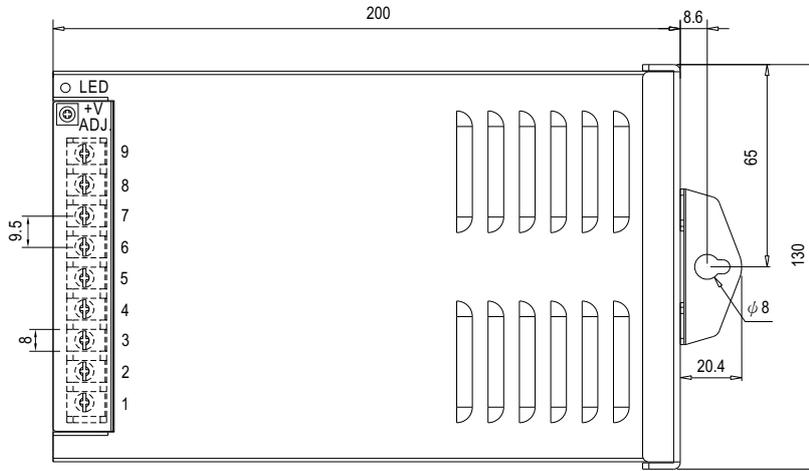


### SPECIFICATION

MODEL	ERP-350-12	ERP-350-24	ERP-350-36	ERP-350-48	
OUTPUT	DC VOLTAGE	12V	24V	36V	48V
	RATED CURRENT	26.7A	14.6A	9.7A	7.3A
	CURRENT RANGE	0 ~ 26.7A	0 ~ 14.6A	0 ~ 9.7A	0 ~ 7.3A
	RATED POWER	320.4W	350.4W	349.2W	350.4W
	RIPPLE & NOISE (max.) Note.2	150mVp-p	150mVp-p	240mVp-p	240mVp-p
	VOLTAGE ADJ. RANGE	10.8 ~ 13.2V	21.6 ~ 26.4V	32.4 ~ 39.6V	43.2 ~ 52.8V
	VOLTAGE TOLERANCE Note.3	±1.0%	±1.0%	±1.0%	±1.0%
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±0.5%	±0.5%	±0.5%	±0.5%
	SETUP, RISE TIME	1500ms, 200ms/230VAC			
HOLD UP TIME (Typ.)	20ms/230VAC				
INPUT	VOLTAGE RANGE	180 ~ 264VAC 254 ~ 370VDC			
	FREQUENCY RANGE	47 ~ 63Hz			
	EFFICIENCY (Typ.)	87%	89%	90%	90%
	AC CURRENT (Typ.)	4A/230VAC			
	INRUSH CURRENT (Typ.)	90A/230VAC			
	LEAKAGE CURRENT	<1mA/ 240VAC			
PROTECTION	OVER LOAD	110 ~ 140% rated output power	130 ~ 180% rated output power	120 ~ 160% rated output power	
		Protection type : Hiccup mode, recovers automatically after fault condition is removed			
	OVER VOLTAGE	13.8 ~ 16.2V	27.6 ~ 32.4V	41.4 ~ 46.8V	57.6 ~ 67.2V
	Protection type :Hiccup mode, recovers automatically after fault condition is removed				
	OVER TEMPERATURE	Shut down O/P voltage, recovers automatically after temperature goes down			
ENVIRONMENT	WORKING TEMP.	-30 ~ +60°C (Refer to output load derating curve)			
	WORKING HUMIDITY	20 ~ 90% RH non-condensing			
	STORAGE TEMP., HUMIDITY	-30 ~ +85°C, 10 ~ 95% RH			
	TEMP. COEFFICIENT	±0.05%/°C (0 ~ 50°C)			
	VIBRATION	10 ~ 500Hz, 3G 10min./1cycle, 60min. each along X, Y, Z axes			
SAFETY & EMC	SAFETY STANDARDS	UL60950-1,GB4943.1-2011(except for ERP-350-12),EAC TP TC 004 approved			
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC			
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500VDC / 25°C / 70% RH			
	EMC EMISSION	Refer to EN55022 (CISPR22) class A, EAC TP TC 020			
	EMC IMMUNITY	Refer to EN61000-4-5;light industry level,criteria A, EAC TP TC 020			
OTHERS	MTBF	321.040Khrs min. MIL-HDBK-217F (25°C)			
	DIMENSION	220.4*130*48mm (L*W*H)			
	PACKING	0.9Kg; 9 pcs/11Kg/0.63CUFT			
NOTE	<ol style="list-style-type: none"> <li>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</li> <li>3. Tolerance : includes set up tolerance, line regulation and load regulation.</li> <li>4. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).</li> </ol>				

■ Mechanical Specification

Case No.230 Unit:mm

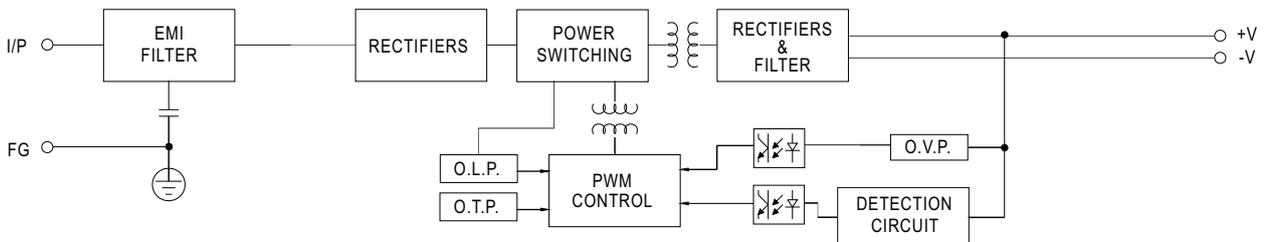


Terminal Pin No. assignment :

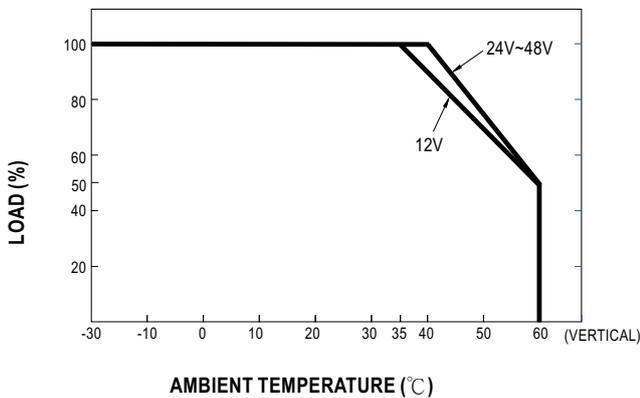
Pin No.	Assignment	Pin No.	Assignment
1	AC/L	4~6	DC OUTPUT -V
2	AC/N	7~9	DC OUTPUT +V
3	FG ≐		

■ Block Diagram

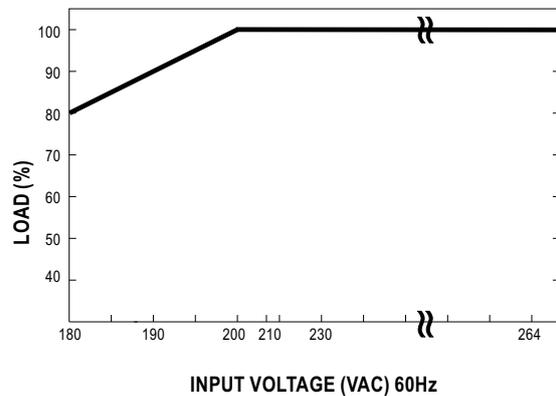
fosc : 90KHz



■ Derating Curve

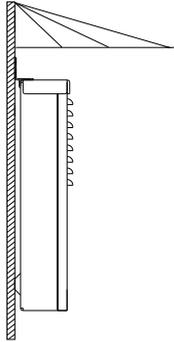


■ Static Characteristics

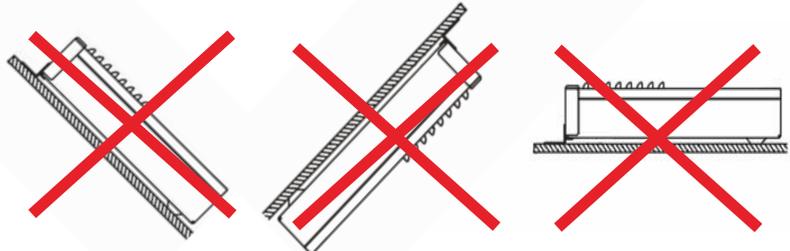


■ Installation

- 1.ERP-350 is designed for outdoor application and should be installed in the place with shelter.
- 2.ERP-350 should be installed in an upright position, leaning forward, backward or lay flat are not allowed.



Correct installation method



Faulty installation methods

- 3.For heat dissipation, at least 10cm installation distance around the PSU should be kept, shown as below:

